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**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

1. (Amended) A heat exchanger [(50)] comprising a stack of parallel [perforated] plates, wherein [(10, 20, 30, 70, 80),]

each plate [(10, 20, 30, 70, 80)] of the stack having perforations [(15A), characterised in that the perforations (15A) define] defining an array of spaced column precursors [(16, 21, 31),] of thickness equal to the plate thickness,

said [the] column precursors [(16, 21, 31)] being joined together by ligaments [(17, 22A, 22B, 32, 33), each ligament extending between a pair of adjacent column precursors ,the ligaments (17, 22A, 22B, 32, 33)] having a thickness less than the plate thickness,

each ligament extending between a pair of adjacent [the] column precursors [(16, 21, 31)] such that the column precursors of any one plate being coincident in the stack with the column precursors [(16, 21, 31)] of any adjacent plate, whereby the stack is provided with an array of individual columns, each column extending perpendicularly to the plane of the plates [(10, 20, 30, 70, 80)],

each plate is provided with extensions in the form of loops which stack together to provide one or more tanks at the sides of the stack, and

whereby fluid flowing through the stack is forced to follow a tortuous flow path [to flow] around the columns, and has the ability to flow parallel to the plane of each said plate.